CERES Subsystem Delivery Procedures

- 1. Review CERES Subsystem Delivery Schedule (http://earth-www.larc.nasa.gov/cerescm/schedules/) when the announcement that the schedule has been updated is received. The current schedule is at the top of the list on the Web page.
- 2. A Software Configuration Change Request (SCCR) should be submitted when you expect or are planning to make changes to your subsystem's software configuration. At the very latest an SCCR must be submitted prior to submitting a preliminary Delivery Memo to CERES CM (CERESlib may be an exception).
- 3. Prepare and send a preliminary Delivery Memo to CERES CM (cerescm@larc.nasa.gov) as scheduled (see File Naming Conventions table). All sections of the Delivery Memo should be completed except D.3.b. Estimate the file sizes for Section C. If you have any questions about how to fill out the Delivery Memo please contact CERES CM. If your Delivery Memo is not in the current format, download the CERES Delivery Memo Template from the CERES CM home page (http://earth-www.larc.nasa.gov/cerescm/). A sample Delivery Memo is also available on the CERES CM home page.
- 4. Test Plans and Operator's Manuals only need to be delivered if they have been updated since the last time they were delivered. If changes need to be made to these documents, download the FrameMaker tar file for the document from the Web. Go to the CERES On-Line Documentation page (http://asd-www/ceres/docs.html) and select the type of document that needs to be updated. Then select the appropriate document from the specific document Web page.
- 5. Ensure that the correct output file names are included in and are consistent between the Test Plan and Operator's Manual and that these names accurately reflect the names of the output files that are created by the software.
- 6. Test Plan Instructions
 - Instructions for how and when to execute the clean-up script(s) should be in the Test Plan.
 - When the code is tested prior to delivery, be sure to use the Test Plan that you intend to send to CERES CM. Once you've completed testing do not change the Test Plan.
 - Be sure that the execution time stated in the Test Plan for each test is accurate as tested on *warlock*.
 - Be sure to include the output file names for the test case(s) either in the Test Plan or in a file included in the delivery package. If the file names are listed in a file, make sure the file is referred to by name in the Test Plan in the appropriate place (i.e., after the output files are created).
- 7. Send the Test Plan and Operator's Manual as e-mail attachments to ceresdoc@larc.nasa.gov. For each document, create a compressed tar file, using the UNIX "compress" command, containing the document in full FrameMaker book form (see File Naming Conventions table). Don't clear the change bars before delivering documents. (Note: If formatting assistance is

- needed for either the Test Plan or Operator's Manual, please send the document with instructions to ceresdoc@larc.nasa.gov.)
- 8. Send Operator's Manual as soon as possible (at least a week or two before delivering to CERES CM). This will shorten operational testing time since the ASDC uses information from the Operator's Manual to write and update scripts used during testing. If information in the Operator's Manual is inaccurate, the testing time will increase.
- 9. Clean-up script(s) for test cases which remove the files created by executing the Test Plan commands should be included in the delivery package.
- 10. Clean-up script(s) which remove files created during production runs should be included in the delivery package and information on the use of these scripts should be in the Operator's Manual.
- 11. Print exit codes to the screen.
- 12. Don't deliver object code or executables.
- 13. Don't deliver the smf.log file.
- 14. Test and create expected output on *warlock*. Get an account on *warlock* if you don't already have one. Go to the correct CERESlib directory (NAG or SGI) for your software and source the CERES environment variable (ceres-env) file in that directory before compiling and testing the code.
- 15. Don't deliver input data for your test cases in other subsystem directories. Include the files somewhere in your subsystem directory structure (e.g. the input directory) and include instructions in the Test Plan for copying (not moving) these files to the appropriate directory (i.e., the directory where the subsystem generating the input data as output data puts the files). Note: Try to provide CERES CM at least 24 hours advance notice if you plan to use input data from archives to create your expected output to ensure the data are staged in the production area before you begin testing. The use of this data also needs to be described in the Test Plan.

16. Tar File Instructions

- In general, there will be 3 tar files provided with each delivery: source, ancillary data, and all other data (see File Naming Conventions table).
- Tar files should be created by the subsystem from the **working group level** (/ENG/CERES/sarb/testing/**sarb/...**) and should include all of the directories from the directory structure established by the Langley DAAC whether or not they contain any files (see Appendix G of the SSI&T Procedures Document found on the Web at http://latis:44712/latis/ under "Documentation").
- Remove extraneous files/directories before creating tar files.
- Tar files should not exceed 1 GB.

- Before compressing tar files do "tar -tvf" to get a listing of the contents of the tar file. Don't use tar_file_list.csh anymore.
 - Example: tar -tvf instrument_src_R3-237.tar > instrument_src_R3-237.list
- Use the UNIX "compress" command to compress the tar files.
- 17. Make the subsystem delivery on or before the scheduled "Delivery to CERES CM" date according to the latest CERES Subsystem Delivery Schedule (http://earth-www.larc.nasa.gov/cerescm/schedules/). If you can't do this, send e-mail to cerescm@larc.nasa.gov as soon as possible.
- 18. Deliver tar files and tar file listings to CERES CM by using the cm_move.csh script found in /CERES/CERES_CM/cm_bin on *lightning*. To do this, from your directory on *thunder* or *lightning* where your tar files reside, type: /CERES/CERES_CM/cm_bin/cm_move.csh <tar_file_name.tar.Z> <tar_file_name.list>
- 19. Send final Delivery Memo to cerescm@larc.nasa.gov (see File Naming Conventions table). All sections should be completed except D.3.b and PDF file sizes.

File Naming Conventions

| File | File Name |
|--|--|
| Preliminary Delivery Memo (FrameMaker) | SS_pre_del_memo_R#-SCCR |
| Final Delivery Memo (FrameMaker) | SS_del_memo_R#-SCCR |
| Test Plan (FrameMaker) | SS_test_plan.book SS_test_plan.cover SS_test_plan.revision SS_test_plan.preface SS_test_planTOC.doc SS_test_planLOF.doc SS_test_planLOT.doc SS_test_plan.doc SS_test_plan.app? |
| Operator's Manual (FrameMaker) | SS_opman.book SS_opman.cover SS_opman.revision SS_opman.preface SS_opmanTOC.doc SS_opmanLOF.doc SS_opmanLOT.doc SS_opman.doc SS_opman.app? |
| Test Plan Compressed Tar File | SS_test_plan_R#V##-SCCR.tar.Z |
| Test Plan (PDF) | SS_test_plan_R#V##-SCCR.pdf |
| Operator's Manual Compressed Tar File | SS_opman_R#V##-SCCR.tar.Z |
| Operator's Manual (PDF) | SS_opman_R#V##-SCCR.pdf |
| Compressed Ancillary Data Tar File | SS_anc_R#-SCCR.tar.Z |
| Ancillary Data List File | SS_anc_R#-SCCR.list |
| Compressed Source Code Tar File | SS_src_R#-SCCR.tar.Z |
| Source Code List File | SS_src_R#-SCCR.list |
| Compressed Other Data Tar File | SS_data_R#-SCCR.tar.Z |
| Other Data List File | SS_data_R#-SCCR.list |
| Requirements Log (Excel) | SS_req_log_V##.xls |

<u>Key</u>

- instrument, erbelike, clouds, inversion, InstSARB, TISAgrid, TISAavg, SynSARB, ggeo, RegridMOA, CERESlib

R# - Release number (example, Release 3 is represented by R3)

V## - Version number (example, Version 2 is represented by V2)

? - Letter of the particular appendix (example, Appendix A is represented by appA)